

REMARKS

Claims 25, 27, 62, 64, and 66 have been amended to change claim dependencies in order that the claims recite correct antecedent basis. Claims 1-79, 93-101, and 169-251 are now pending in the application.

A. Rejection under 35 U.S.C. §112

Claims 1-76, 93-101 and 169-251 were rejected under 35 U.S.C. §112 for lack of enablement and/or indefiniteness. Applicants respectfully point out, however, that claims 1-76 and 93-101 were previously allowed as evidenced by the Notice of Allowance issued on October 4, 2004. As such, claims 1-76 and 93-101 were already found to satisfy the requirements of 35 U.S.C. §112; the claims were found to be both enabled by the specification and clearly described.

A claim previously noted as allowable shall thereafter be rejected **only** after the proposed rejection has been submitted to the primary examiner for consideration and approval. MPEP §706.04, 1308.01. Rejection of previously allowed claims requires the primary examiner's approval and signature. MPEP §1005. **Great care should be exercised in rejecting claims that have been previously held to be allowable.** MPEP §706.04, 1308.01.

In view of the fact that rejection of these previously allowed claims has not been considered by the primary examiner and since the Office Action rejecting the claims was not signed by the primary examiner, the rejection as to claims 1-76 and 93-101 is ineffective and should be withdrawn.

Furthermore, and in any event, claims 1-76, 93-101, as well as claims 169-251 are both enabled and clearly described and

satisfy the requirements of 35 U.S.C. §112 for the reasons discussed in more detail below.

### Enablement

Claims 1-22, 30-59, 67-76, 93-97, 99-101, and 169-251 are rejected under 35 U.S.C. §112, for lack of enablement. Applicants respectfully traverse the rejection for the reasons set forth in Amendment A, submitted on August 11, 2003, for the reasons set forth in Amendment B, submitted on September 2, 2004, and for the reasons set forth below. Reconsideration and withdrawal of the rejection are respectfully requested.

As a matter of Patent Office practice, a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond to those used in describing and defining the subject matter sought to be patented **must** be taken as in compliance with the enabling requirement of the first paragraph of §112 **unless** there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support. *In re Marzocchi*, 439 F.2d 220, 169 USPQ 367, 370 (CCPA 1971); see also MPEP §2164.04. Furthermore, "it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain **why** it doubts the truth or accuracy of any statement made in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. *Id.*, 169 USPQ at 370. Thus, the burden rests upon the Office to establish a prima facie case of non-enablement, which requires the Office to provide acceptable evidence or reasoning inconsistent with the contested statements. *Id.*; see also *In re Strahilevitz*, 668 F.3d 1229, 1232 (CCPA 1982). The Office has not met this burden.

The test to determine if an invention is sufficiently enabled is whether one skilled in the art can make and use the invention without undue experimentation. MPEP §2164.01. The factors to be considered in determining whether a disclosure meets the enablement requirement include the nature of the invention, the state of the prior art, the predictability or lack thereof in the art, the amount of direction or guidance present, the presence or absence of working examples, the breadth of the claims, the quantity of experimentation needed, and the level of the skill in the art. *In re Wands*, 858 F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988). Applicants submit that the specification fully meets the requirements of 35 U.S.C. § 112, first paragraph because the combination of specific examples and general teaching of the specification along with knowledge common to those skilled in the art would fully enable a person of ordinary skill in the art to practice the process as claimed without undue experimentation.

In making its rejection, the Office cites a number of references and argues that the dehydrogenation of a primary alcohol to a carboxylic acid is unpredictable. The Office bases the unpredictability primarily upon two of the cited references, namely U.S. Patent No. 1,975,853 and U.S. Patent No. 3,254,128. With regard to the '853 patent, the Office admits that the '853 patent describes a process wherein a primary alcohol is dehydrogenated to form a carboxylic acid. The Office argues, however, that ester, aldehyde and ketone are produced along with the carboxylic acid. The fact that the prior art teaches that the dehydrogenation of a primary alcohol will result in the production of a carboxylic acid, if anything, supports the enablement of the present claims. That the process of the '853 patent produces other compounds along with the carboxylic acid

does not diminish the fact that the process of the '853 patent did in fact form a carboxylic acid by the dehydrogenation of a primary alcohol using a copper containing catalyst.

Regarding the '128 patent, the Office improperly includes the '128 patent as the state of the prior art. The state of the prior art is what one skilled in the art would have known at the time the application was filed as to the **subject matter of the claimed invention**. MPEP §2164.05(a). While the '128 patent is directed to dehydrogenation of primary alcohols to aldehydes in the presence of a catalyst composition; the catalyst composition of the '128 patent does not include a **copper** containing catalyst as required by the present claims and is not directed to the subject matter of the claimed invention.

Moreover, U.S. Patent No. 5,367,112, Franczyk, which was cited by but not discussed by the Office is highly relevant to the state of the prior art. The '112 patent discloses a method of preparation of carboxylic acid salts by the reaction of **primary alcohols** in the presence of a copper catalyst (col. 1, lines 12-16). Suitable primary alcohols can be **aliphatic, cyclic, or aromatic** (col. 2, lines 18-24).

Applicants submit that in consideration of the state of the art, the predictability of the art, and the combination of specific examples and general teaching of the specification, the disclosure fully enables a person of ordinary skill in the art to practice the process as claimed without undue experimentation, thereby fulfilling the enablement requirement of 35 U.S.C. §112, first paragraph.

### **Definiteness**

Claims 2-76, 93-101, and 169-251 are rejected under 35 U.S.C. §112, second paragraph as indefinite. Rejection of

claims 2-76 and 93-101 is ineffective for the reasons set forth above. Furthermore and in any event, claims 2-76 and 93-101 as well as 169-251 are definite and, as such, satisfy the requirements of 35 U.S.C. §112. Reconsideration and withdrawal of the rejection are respectfully requested.

The test to determine if a claim is definite is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification."

*Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986) and MPEP §2173.02. A claim may not be rejected solely because of the type of language used to define the subject matter for which a patent is sought. *In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), MPEP §2173.01.

Claims 2-4, 7-8, 11, 19, 32, 34, 35-40, 49, 51, 54, 67-68, 93, 169, 171-176, 190, 196, 216, 219, 222, 225, 228, 231, 234, 237, 240, 243, 246, and 249 have been rejected as indefinite for reciting the phrase "at least about." The Office states that the mere recitation of the phrase is invalid as indicated in the MPEP. However, the MPEP states "Office policy is not to employ *per se* rules to make technical rejections." MPEP §2173.02.

The office has mischaracterized the holding of *Amgen Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991). In *Amgen Inc.*, the Court at least partially relied on the fact that the claimed range could not be precisely measured and exhibited a wide range of error and that the Applicant had used the claimed range to distinguish the prior art; the Court did not rule that the use of the phrase "at least about" in a claim renders the claim invalid *per se*. Applicants searched the USPTO archives for the phrase "at least about" and, not surprisingly, found that it appears in the claims of well

over 62,000 issued patents. In the present application, all numerical ranges can clearly be assessed through methods known to those in the art and, as such, are definite. *W.L. Gore & Associates, Inc. V. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983).

Claims 15, 16, 23, 60, 98, and 99 have been rejected as indefinite for recitation of the phrase "said primary alcohol comprises" or the phrase "said carboxylic acid salt comprises." The Office states that the phrases are indefinite because they "do not exclude the presence of other ingredients than the ones recited." Applicants do not fully understand the reasoning behind the rejection. The present invention is not limited to processes in which a sole primary alcohol is dehydrogenated at the exclusion of others or processes in which a sole carboxylic acid salt is prepared at the exclusion of others (p. 53, lines 3-8). Moreover, the mere fact that an ingredient or product comprises a desired compound but does not exclude other ingredients does not render a claim indefinite.

Claims 15, 23, 25, 60, 62, and 98 have been rejected as indefinite for recitation of the phrase "substituted hydrocarbyl." The Office claims that the phrase is indefinite "because the claim does not specify what the hydrocarbyl is substituted with." The specification states:

substituted hydrocarbyl may be any hydrocarbyl wherein at least one hydrogen atom has been substituted with an atom other than hydrogen or a group of atoms containing at least one atom other than hydrogen. For example, the hydrogen atom may be substituted with a halogen atom, such as a chlorine or fluorine atom. The hydrogen atom alternatively may be substituted with an oxygen atom or a group containing an oxygen atom to form, for example, a hydroxy group, an ether, an ester, an anhydride, an aldehyde, a ketone, or a

carboxylic acid. The hydrogen atom also may be replaced with a group containing a nitrogen atom to form, for example, an amide or a nitro group. In addition, the hydrogen atom may be substituted with a group containing a sulfur atom to form, for example, -SO<sub>3</sub>H. P. 11, lines 19-28 (emphasis added).

The meaning of "substituted hydrocarbyl" is apparent from the specification thereby apprising those skilled in the art of the scope of the claim. As such, recitation of the phrase "substituted hydrocarbyl" does not render the claim indefinite.

**B. Rejection under 35 U.S.C. §103(a)**

Reconsideration is requested of the rejection of claims 1, 15-18, 23-31, 46-47, 49-52, 54-75, 93-101, 194-209, and 228-251 as obvious over Goto et al. (U.S. Pat. No. 4,782,183) in view of Franczyk, II et al. (U.S. Pat. No. 6,646,160).

The present application was filed on April 11, 2001. Franczyk, II et al. issued on November 11, 2003 and is only available as prior art under 35 U.S.C. §102(e), (f), or (g).

The present application, Application No. 09/832,541, and Patent No. 6,646,160 (Franczyk, II et al.) were, at the time of invention of Application No. 09/832,541, owned by, or subject to an obligation of assignment to, Monsanto Technology, LLC. In view of the above, Franczyk, II et al., is removed as a reference under 35 U.S.C. §103(c), thereby obviating the rejection of claims 1, 15-18, 23-31, 46-47, 49-52, 54-75, 93-101, 194-209, and 228-251 as obvious.



MTC 6638.7  
39-21(51753)B  
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CONCLUSION

Favorable reconsideration and allowance of all pending claims are respectfully solicited.

The Commissioner is requested to charge any fee deficiency or overpayment in connection with this amendment to Deposit Account 19-1345.

Respectfully submitted,

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